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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,398	01/08/1999	KENT K. LEUNG	CISCP077	8362

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/227,398

Applicant(s)  
Kent K. Leung

Examiner  
Naghmeh Mehrpour

Art Unit  
2685



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 9, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-20, and 22-47 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-20, and 22-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-9, 12-20, 22-47**, are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art as mentioned on specification on pages 1-5 in view of RFC 2139 Rigney. Regarding **Claims 1, 3, 13, 23, 27, 37, 39, 42, 44, 47**, the admitted prior art teaches a network device which supports mobile IP and is configured to send an accounting request, the accounting request identifying a mobile node, the network device comprising: a memory, and a processor coupled to the memory, wherein the network device is adapted for updating a counter associated with the mobile node's activity that identified in the request packet using the counter of the request packet (Page 3 lines 23-30, Page 4 lines 1-5), and the network device being a Home Agent supporting the mobile node or a Foreign Agent to which the mobile node has roamed (Page 2 lines 2-6). The admitted prior art does not specifically mention that the network device adapted for sending the accounting request including the counter to a server adapted for recording accounting information associated with the mobile node, and **wherein the server maintain accounting information for a plurality of network devices, each of the plurality of network devices a Home Agent or a Foreign Agent adapted for sending an accounting**

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**request to the server being a Home Agent or a Foreign Agent adapted for sending an accounting request to the server to update accounting information associated with a mobile node.** However RFC 2139 teaches that the network device adapted for sending the accounting request identifying the mobile node (Page 8 section 4.2 Accounting-Response) and including the counter to a server adapted for recording accounting information associated with the mobile node (Page 8, section, Page 9 Accounting-Response, Identifier). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of RFC to the admitted prior art, in order provide the quantity of information sent and received by mobile nodes. The combination of the admitted prior art and RFC fails to teach that **the server maintain accounting information for a plurality of network devices, each of the plurality of network devices a Home Agent or a Foreign Agent adapted for sending an accounting request to the server being a Home Agent or a Foreign Agent adapted for sending an accounting request to the server to update accounting information associated with a mobile node** (col 2 lines 63-67, col 3 lines 1-6, lines 12-16). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of Rai to the combination of the admitted prior art and RFC, in order to enable the corporate users accessing network from home or while on the road, while the end users only pay for the cost of connecting to corporate remote access.

Regarding **Claims 2, 5, 9, 15-17, 20, 25, 29-31, 34**, the admitted prior art teaches a network device received and send packets by the mobile node (Page 3 lines 4-18) .The admitted prior art

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does not specifically mention that a counter indicates number of packets and number of bytes that received and send to the mobile node. However RFC 2139 teaches a counter indicates number of packets and number of bytes that received and send to the mobile node (Page 9 lines 10-15 the format of bytes) Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of RFC 2139 to the admitted prior art, in order to keep track of number times that system registers.

Regarding **Claims 4, 26, 28, 38, 40-41, 43**, the admitted prior art teaches a server that is adapted for sending an accounting reply to the network device in response to the accounting request ( Page 3 lines 4-10, lines 25-30). The admitted prior art fails to teach that the accounting reply acknowledging logging of the accounting information pertaining to the mobile node. However RFC 2139 teaches that the accounting reply acknowledging logging of the accounting information pertaining to the mobile node (Page 4 section 2 operation). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide teaching of RFC 2139 to the admitted prior art, in order to let the mobile know that the registration is complete.

Regarding **Claims 6-7, 14, 18, 32**, the admitted prior art teaches a server wherein the counter indicates a number of registrations that have been accepted (Page 3 lines 26-30).

Regarding **Claims 8, 19, 33, 45**, the admitted prior art teaches a server wherein the counter indicates a total service time for the mobile node (Page 3 lines 27-28).

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Regarding **Claim 46**, the admitted prior art teaches a server wherein the network device is a Home Agent or a Foreign Agent (Page 2 lines 2-6).

Regarding **Claims 12, 22, 36**, the admitted prior art fails to teach a server wherein the server is a RADIUS server. However RFC 2139 publication teaches a server wherein the server is RADIUS server (Pages 7 section 4.1 Accounting-Request). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of RFC to the admitted prior art, in order to provide security association for registration authentication.

Regarding **Claim 24**, the admitted prior art teaches a method further including forwarding the data packet to another network device (Page 3 lines 7-12).

### ***Response to Arguments***

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**5. Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308--6296, (for formal communications intended for entry)

**Or:**

(703) 308-6306, (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II. 2121 Crystal Drive,  
Arlington. Va., sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The

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examiner can normally be reached on Monday through Thursday (first week of bi-week) and  
Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

NM

Feb 17, 2003

  
2/21/03  
LESTER G. KINCAID  
PRIMARY EXAMINER